

Please add Claims 96-185 as follows:

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~~96. C₇₀ in macroscopic amounts.~~

97. The C₆₀ of Claim 86 wherein the C₆₀ is present in amounts that are capable of being detected by IR.

98. The C₆₀ of Claim 86 wherein the C₆₀ is present in amounts that are capable of being detected by UV absorption.

99. The C₆₀ of Claim 86 wherein the C₆₀ is present in amounts sufficient to obtain an X-ray diffraction pattern thereof.

100. The C₇₀ of Claim 96 in which the C₇₀ is present in amounts that are capable of being detected by UV.

101. The C₇₀ of Claim 96 in which the C₇₀ is present in amounts that are capable of being detected by IR.

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~~102. Macroscopic amounts of substantially pure C₆₀.~~

~~103. Macroscopic amounts of substantially pure C₇₀.~~

104. A formed or molded product comprising C₇₀, said C₇₀ being present in macroscopic amounts.

105. A free flowing particulate comprising C₇₀, said C₇₀ being present in macroscopic amounts.

106. A formed or molded product comprising C₆₀, said C₆₀ being present in macroscopic amounts.

107. A free flowing particulate comprised of C₆₀, said C₆₀ being present in macroscopic amounts.

108. The solid carbon product of Claim 53, wherein the recovered C₆₀ molecules in said solid are in macroscopic amounts.

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109. The solid carbon product of Claim 53 wherein recovered C₆₀ in said solid carbon products are in amounts that are capable of being detected by IR.

110. The solid carbon product of Claim 53 wherein the recovered C_{60} in said solid carbon products are in amounts that are capable of being detected by UV.

111. A solid comprising C_{60} , said C_{60} being present in macroscopic amounts.

112. A solid comprising C_{70} , said C_{70} being present in macroscopic amounts.

113. A sooty product comprising C_{60} , the C_{60} in said sooty product being present in sufficient concentration to allow macroscopic amounts of said C_{60} to be separated therefrom.

114. A sooty product comprising C_{70} , the C_{70} in said sooty product being present in sufficient concentrations to allow macroscopic amounts of said C_{70} to be separated therefrom.

115. The sooty product of Claim 113, in which the C_{60} is present in amounts that are capable of being detected by IR.

116. The sooty product of Claim 114 in which the C_{70} is present in amounts that are capable of being detected by IR.

117. The sooty product of Claim 113 in which the C_{60} is present in amounts that are capable of being detected by UV.

118. The sooty product of Claim 114 in which the C_{70} is present in amounts that are capable of being detected by UV.

119. A sooty carbon product prepared by the process comprising:

(a) vaporizing a carbon source in the presence of an inert gas to provide a vapor of carbon atoms,

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(b) quenching said vapor of carbon in said inert gas under conditions effective to nucleate and condense said vapor of carbon atoms into a sooty carbon product comprising C_{60} molecules, said C_{60} molecules being present in said sooty carbon in sufficient concentrations to allow macroscopic amounts of C_{60} to be separated from said soot.

120. The sooty carbon product of Claim 119 in which the C_{60} is present in amounts that are capable of being detected by IR.

121. The sooty carbon product of Claim 119 in which the C_{60} is present in amounts that are capable of being detected by UV.

122. The sooty carbon product of Claim 113, additionally comprising C_{70} .

123. The sooty carbon product of Claim 119 additionally comprising C_{70} .

124. The sooty carbon product of Claim 119 in which the carbon source subject to vaporization in step (a) is graphite or amorphous or glassy carbon.

125. The sooty carbon product of Claim 119 in which the carbon source subject to vaporization in step (a) is graphite.

126. The sooty carbon product of Claim 119 in which the carbon source subject to vaporization in step (a) is graphite rods.

127. The sooty carbon product of Claim 119 in which the carbon source in step (a) is vaporized in an evacuated reactor.

128. The sooty carbon product of Claim 119 in which the carbon source in step (a) is vaporized in an evacuated bell jar.

129. The sooty carbon product of Claim 119 in which the inert gas is a noble gas.

130. The sooty carbon product of Claim 129 in which the noble gas is helium or argon.

131. The sooty carbon product of Claim 119 in which the process is conducted at a pressure sufficient to nucleate said carbon vapor.

132. The sooty carbon product of Claim 131 in which the pressure ranges from 60 torr to 400 torr.

133. The C_{60} of Claim 86 in which the C_{60} is present in amounts sufficient to take a micrograph.

134. The solid C_{60} of Claim 111 in which the C_{60} is present in amounts sufficient to take a micrograph.

135. The C_{60} of Claim 102 in which the C_{60} is present in amounts capable of being detected by IR.

136. The C_{60} of Claim 102 in which the C_{60} is present in amounts capable of being detected by UV.

137. The C_{60} of Claim 102 in which the C_{60} is present in amounts sufficient to obtain an X-ray diffraction pattern thereof.

138. The C_{60} of Claim 102 in which the C_{60} is present in amounts sufficient to take a micrograph.

139. The C_{70} of Claim 103 in which the C_{70} is present in amounts capable of being detected by UV.

140. The C_{70} of Claim 103 in which the C_{70} is present in amounts capable of being detected by IR.

141. A solid carbon product prepared by the process comprising:

(a) evaporating a carbon source in the presence of an inert quenching gas under conditions effective to produce a sooty carbon product containing C_{60} , said C_{60} being present in said sooty carbon product in sufficient concentration to allow

a macroscopic amount of said C_{60} to be separated from said sooty product;

(b) collecting the sooty carbon product produced therefrom;

(c) subliming the carbon product comprising C_{60} from the sooty carbon product; and

(d) condensing the sublimed carbon product comprising C_{60} .

142. The solid carbon product of Claim 141 wherein the sublimation occurs at a temperature ranging from 300°-400°C.

143. The solid carbon product of Claim 142 wherein step (c) comprises heating the carbon product comprising C_{60} in a vacuum or inert atmosphere at effective sublimation temperatures to extract the carbon product comprising C_{60} from said sooty carbon product.

144. The solid carbon product of Claim 141 in which the carbon source in step (a) is vaporized in an evacuated reactor.

145. The solid carbon product of Claim 144 in which the carbon in step (a) is vaporized in an evacuated bell jar.

146. The solid carbon product of Claim 141 in which the carbon subject to vaporization in step (a) is graphite.

147. The solid carbon product of Claim 141 in which the carbon subject to vaporization in step (a) is graphite rods.

148. The solid carbon product of Claim 141 wherein the carbon source in step (a) is vaporized by passing an electric current of sufficient intensity to produce a sooty carbon product.

149. The solid carbon product of Claim 148 wherein the electrical current is about 100 amps.

150. The solid carbon product of Claim 141 wherein the inert quenching gas of step (a) is a noble gas.

151. The solid carbon product of Claim 141 wherein the carbon source in step (a) is vaporized at a pressure ranging from 50 torr to 400 torr.

152. The solid carbon product of Claim 151 wherein the carbon source is vaporized in step (a) at approximately 100 torr.

153. The solid carbon product of Claim 53 wherein the collecting substrate in step (b) is a glass surface.

154. The solid carbon product of Claim 150 wherein the noble gas is helium or argon.

155. The solid carbon product of Claim 141 wherein C_{70} is additionally present.

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156. The solid carbon product of Claim 155 wherein C_{70} is separated from C_{60} by sublimation, fractionally, crystallization, column chromatography, fractional crystallization, column chromatography, capillary electrophoresis, HPLC, preparative thin layer chromatography, crystallization, or extraction.

157. The solid carbon product of Claim 155 wherein the C_{70} is separated from C_{60} by sublimation.

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158. The solid carbon product of Claim 141 wherein the C_{60} is present in amounts capable of being detected by IR.

159. The solid carbon product of Claim 141 wherein the C_{60} is present in amounts capable of being detected by UV.

160. The solid carbon product of Claim 141 wherein the C_{60} is present in amounts sufficient to obtain an X-ray diffraction pattern thereof.

161. The solid carbon product according to Claim 141 in which the C_{60} is present in amounts sufficient to take a micrograph.

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162. The solid carbon product according to Claim 155 wherein the C_{70} is present in macroscopic amounts.

163. The solid carbon product according to Claim 162 wherein the C_{70} is present in amounts that are capable of being detected by UV.

164. The solid carbon product according to Claim 162 wherein the C_{70} is present in amounts that are capable of being detected by IR.

165. A solid comprising macroscopic amounts of crystalline C_{60} .

166. A solid comprising macroscopic amounts of crystalline C_{70} .

167. A carbon product comprising macroscopic amounts of solid C_{60} .

168. A carbon product comprising macroscopic amounts of solid C_{70} .

169. The carbon product of Claim 167 wherein the solid C_{60} is crystalline C_{60} .

170. The carbon product of Claim 168 wherein the solid C_{70} is crystalline C_{70} .

171. The solid according to Claim 111 wherein C_{60} is present in amounts that are capable of being detected by IR.

172. The solid according to Claim 111 wherein the C_{60} is present in amounts that are capable of being detected by UV.

173. The solid according to Claim 111 wherein the C_{60} is present in amounts sufficient to obtain X-ray diffraction pattern thereof.

174. The solid according to Claim 111 wherein the C_{70} is present in amounts that are capable of being detected by UV.